

Clinical Trial Design Strategies

Nina R. Schooler, Ph.D.

Hillside Hospital

Glen Oaks, NY

Parameters

- Site selection
- Subject recruitment
- Trial duration
- Inclusion - exclusion criteria
- Randomization
- Treatment blinding
- Assessment blinding

Site Selection

- “Tertiary” Center
 - System in place
 - Experienced staff
 - Experienced subjects
 - How generalizable to other settings
- Community Setting
 - No system
 - Inexperienced staff
 - Possible staff resistance
 - Naive subjects
 - Ready generalizability

Subject Recruitment

- Criterion based
 - Search the halls and charts
 - What is the reference population?
 - Inferential statistics assume that cohort is a sample
- Population based
 - Enumerate population and draw a sample
 - Reference population is defined
 - Refusers can be readily identified

Trial Duration

- Brief
 - Higher completion rate
 - Most treatments for mental illness not short term
 - No estimate of long- term compliance
- Long-term
 - Completion rate may drop
 - Can estimate long-term effects
 - Can estimate long-term compliance

Inclusion-Exclusion Criteria

- Narrow
 - No concomitant treatments
 - No co-morbid diagnoses
 - “Clean” estimate of treatment effects
 - Limited “real world” applicability
- Broad
 - Take “all comers”
 - Target treatment effects may be confounded
 - This is the “real world”

Randomization

- YES

- Controls for selection bias
- Clinicians and patients may prefer “clinician’s choice”
- May decrease trial participation and generalizability

- NO

- Selection bias runs wild
- May enhance participation
- Clinician choice confounded with treatment effect

Treatment Blinding

- YES

- Control for biases
- Cumbersome and expensive
- Some treatments cannot be blinded
- Blind may be broken by side effects

- NO

- Lose control of biases
- Like usual care
- Some treatments can't be blinded
- Some sites can't treat blindly

Assessment Blinding/Masking

- YES
 - Controls bias in non-blind studies
 - Logistically complex
 - Side effects may break blind
 - Non-blind people may “give it away
- NO
 - Yet another opportunity for bias
 - Logistically easier
 - Treaters can be assessors